

REMARKS

Applicant hereby supplements and re-submits the amendment previously mailed on September 4, 2001.

Claims 1-240 are in the application (claims 1-72 being in the original patent and claims 73-240 added at the time of filing of this reissue application). Claims 1-72 were allowed. Various claims were indicated as rejected for various informalities. Certain claims were rejected in view of Greszczuk and/or Hamada.

Applicant has endeavored herein to address the various informalities noted by the Examiner (Applicant appreciates the careful review and detailed comments provided by Examiner Nguyen). Applicant also has corrected certain informalities that were noted during preparation of this amendment. Applicant also wishes to provide the following additional comments.

A new oath/declaration is included herewith, wherein at least one error upon which the reissue application is based is described in greater detail.

With respect to the rejection of claims 176, 184, 196, 208, 220 and 232 under Section 112 (based on the phrase "first protocol at a first point in time" and "second protocol at a second point in time"), Applicant respectfully traverses this rejection. Applicant submits that the original disclosure (see, e.g., col. 12, lines 31-36 of the issued patent) provides adequate support for this limitation.

With respect to the rejection of claims 149, 156, 163, 170, 177, 185, 197, 209, 221 and 233 (based on the phrase "protocol is determined automatically"), Applicant also respectfully traverses this rejection. Applicant submits that the original disclosure (see, e.g., col. 12, lines 1-15 of the issued patent) also provides adequate support for this limitation.

Applicant thanks Examiner Nguyen for correctly noting the error in claim 168, which has now been amended to depend from claim 167. Applicant also has amended claim 126 to correct the informality as noted by the Examiner.

In addition, Applicant thanks Examiner Nguyen for pointing out that the changes from the Certificate of Correction were not included in the originally-filed reissue application. Herewith Applicant is submitting two substitute pages of the specification, which include the corrections included in the certificate of correction.

With respect to the rejection of claims 145, 152, 159, 166, 173, 181, 193, 205, 217 and 229 (based on the phrase "best or desired manner"), Applicant respectfully traverses this rejection based on the original disclosure (see, e.g., col. 3, lines 20-22, col. 12, lines 52-67, etc.).

Applicant submits that, in view of the overall disclosure, that the subject phrase would be understood by one of skill in the art to mean an optimum or desired operation for the particular circumstances.

With respect to the rejection in paragraph no. 10 of the office action, Applicant respectfully traverses this rejection. For example, claim 74 "narrows" claim 73 by reciting particular structure (e.g., frame receiving circuitry included in the first endpoint receiver, etc.), and thus further limits the subject matter of independent claim 73. Similar analysis applies to the other rejected claims. As Applicant's attorney apparently does not understand the basis for this rejection, Applicant's attorney requests that this rejection be withdrawn (for the reasons explained above, or alternatively be given an opportunity to discuss such matters with the Examiner by way of a telephone or in-person interview.

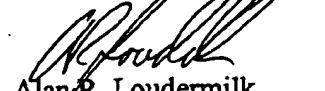
Applicant also amended the claims to address the Markush objection, and also the rejection under 35 U.S.C. 251, which should obviate or overcome these objections/rejections.

With respect to the rejections under Section 102 and 103, Applicant submits that, as with the original claims, claims 73-240, as now presented, patentably distinguish over the cited art. The multi-mode modem disclosure of Greszczuk, which uses a sequential technique to detect the modulation method of another modem with which to communicate, is quite far technically from Applicant's invention and certainly does not disclose or suggest Applicant's invention, and Hamada does not provide what Greszczuk is lacking. Thus, as now presented, as with the original claims, Applicant submits that all claims patentably distinguish over the cited references.

Accordingly, Applicant has endeavored herein to address the various matters raised by the Examiner and to otherwise put this application in condition for allowance.

Reconsideration and allowance is requested.

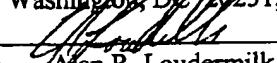
Respectfully submitted,


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CERTIFICATE OF MAILING (37 CFR 1.8a)

I hereby certify that the foregoing is being deposited with the U.S. Postal Service, postage prepaid, to the
Assistant Commissioner for Patents, Washington, DC 20231, this 8th day of November, 2001.

By:  Alan R. Loudermilk

35. The apparatus according to claim 29 wherein the frame receiving circuitry includes packet converting circuitry for converting received data formatted in the frame structure into data formatted in the packet structure.

36. The apparatus according to claim 35 wherein the hub protocol signal indicates an ethernet protocol, and wherein the transmitted data formatted in the packet structure is formatted according to the ethernet protocol.

37. The apparatus according to claim 35 wherein the hub protocol signal indicates a token-ring protocol, and wherein the transmitted data formatted in the packet structure is formatted according to the token-ring protocol. 10

38. The apparatus according to claim 35 wherein the hub protocol signal indicates an isochronous-ethernet protocol, and wherein the transmitted data formatted in the frame structure is formatted according to the isochronous-ethernet protocol. 15

39. The apparatus according to claim 35 wherein the hub protocol signal indicates an isochronous-token ring protocol, and wherein the transmitted data formatted in the frame structure is formatted according to the isochronous-token ring protocol. 20

40. The apparatus according to claim 29 wherein the frame receiving circuitry includes isochronous converting circuitry for converting received data formatted in a frame structure into data formatted in an isochronous structure. 25

41. The apparatus according to claim 40 wherein the hub protocol signal indicates an isochronous protocol.

42. An apparatus as set forth in claim 24 wherein said node transmitter transmits said node protocol signal responsive to said node receiver receiving said hub protocol signal. 30

43. The apparatus according to claim 24 wherein the hub receiver includes frame receiving circuitry for receiving data formatted in a frame structure, and isochronous receiving circuitry for receiving data formatted in an isochronous structure, wherein the received data formatted in a frame structure and the received data formatted in the isochronous structure are received over the same receiving communication path, and wherein the hub transmitter includes frame transmitting circuitry for transmitting data formatted in a frame structure, and isochronous transmitting circuitry for transmitting data formatted in an isochronous structure, wherein the transmitted data formatted in the frame structure and the transmitted data formatted in the isochronous structure are transmitted over the same transmitting communication path. 35

44. The apparatus according to claim 43 wherein the hub protocol signal indicates an isochronous protocol.

45. The apparatus according to claim 43 wherein the hub protocol signal indicates an isochronous-ethernet protocol, and wherein the transmitted data formatted in the frame structure is formatted according to the isochronous-ethernet protocol. 50

46. The apparatus according to claim 43 wherein the hub protocol signal indicates an isochronous-token ring protocol, and wherein the transmitted data formatted in the frame structure is formatted according to the isochronous-token ring protocol. 55

47. The apparatus according to claim 43 wherein the frame receiving circuitry includes isochronous converting circuitry for converting received data formatted in a frame structure into data formatted in an isochronous structure. 60

48. The apparatus according to claim 47 wherein the hub protocol signal indicates an isochronous protocol.

49. The apparatus according to claim 47 wherein the hub protocol signal indicates an isochronous-ethernet protocol, and wherein the transmitted data formatted in the frame structure is formatted according to the isochronous-ethernet protocol. 65

50. The apparatus according to claim 47 wherein the hub protocol signal indicates an isochronous-token ring protocol, and wherein the transmitted data formatted in the frame structure is formatted according to the isochronous-token ring protocol.

51. The apparatus according to claim 47 wherein the frame receiving circuitry includes packet converting circuitry for converting received data formatted in a frame structure into data formatted in a packet structure.

52. The apparatus according to claim 51 wherein the hub protocol signal indicates an ethernet protocol, and wherein the transmitted data formatted in the packet structure is formatted according to the ethernet protocol.

53. The apparatus according to claim 51 wherein the hub protocol signal indicates a token-ring protocol, and wherein the transmitted data formatted in the packet structure is formatted according to the token-ring protocol.

54. The apparatus according to claim 51 wherein the hub protocol signal indicates an isochronous-ethernet protocol, and wherein the transmitted data formatted in the frame structure is formatted according to the isochronous-ethernet protocol.

55. The apparatus according to claim 51 wherein the hub protocol signal indicates an isochronous-token ring protocol, and wherein the transmitted data formatted in the frame structure is formatted according to the isochronous-token ring protocol.

56. The apparatus according to claim 51 wherein the hub protocol signal indicates an isochronous protocol.

57. In a data communication network comprising at least first and second communication endpoints, an apparatus for establishing communication between the first and second endpoints comprising:

- 35 a first endpoint transmitter coupled to the first endpoint for transmitting a first endpoint protocol signal to the second endpoint, the first endpoint protocol signal indicating a communication protocol, including a format for data transmission, with which the first endpoint is capable of communicating;
- 40 a second endpoint receiver coupled to the second endpoint for receiving the first endpoint protocol signal;
- 45 a second endpoint transmitter coupled to the second endpoint receiver for transmitting a second endpoint protocol signal to the first endpoint, the second endpoint protocol signal indicating a communication protocol, including a format for data transmission with which the second endpoint is capable of communicating;
- 50 a first endpoint receiver coupled to the first endpoint for receiving the second endpoint protocol signal;
- 55 a protocol identifying circuit coupled to the first endpoint receiver for identifying the communication protocol indicated by the second endpoint protocol signal from among a plurality of possible communication protocols with which the first endpoint is capable of communicating; and
- 60 a communication circuit in said first endpoint transmitter responsive to said protocol identifying circuit for communicating with the second endpoint using the communication protocol indicated by the second endpoint protocol signal.

58. The apparatus according to claim 57 wherein the communication circuit includes a first receiver sub-circuit in said first endpoint receiver and a first transmitter sub-circuit in said first endpoint transmitter for communicating using a first communication protocol and a second receiver sub-